***COMPLETE IN NOTEBOOK! COPY ALL FIGURES!***

CW25: Corresponding Sides and Angles

**Geometry**

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| You will be able to define congruence. You will be able to determine corresponding sides and angles to prove triangles congruent. | |
| Criteria for success:   * Identify corresponding sides and angles using tick marks and corner markings. * Identify transformation that produced the congruent triangle | |
| Introduction: What makes two triangles congruent? | Introduction: What does corresponding mean? |
| 1. EGI and QMO are congruent. a. Find the rigid motion (transformation) that carries one triangle onto the other.  b. Make a list of the three pairs of corresponding angles and the three pairs of corresponding sides. | 1. TRV and YXZ are congruent a. Find the rigid motion (transformation) that carries one triangle onto the other.  b. Make a list of the three pairs of corresponding angles and the three pairs of corresponding sides. |
| Break 1: Order matters! Explain why the statement is written TRV and YXZ and NOT TVR and YXZ. | |
| Break 2: If two angles in a triangle are congruent to two angles in another triangle, what conclusion can be drawn about the third angle? Draw a picture to illustrate your point. | |
| |  | | --- | | DIRECTIONS:  a. Find the rigid motion (transformation) that carries one figure onto the other.  b. Make a list of the pairs of corresponding angles and the pairs of corresponding sides. c. Find the missing values. | | |
| |  |  | | --- | --- | | 1. In the diagram to the below, QRST ≅ WXYZ. | 1. Given ΔHJK ≅ Δ TRS. | | |
| 5) Given ΔABC ≅ ΔDEF. | 6) Given Δ KOM ≅ ΔRVT |

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| Directions: For each of the problems below find the value of the indicated angle. | |
| 7) a. Find the value of the indicated angle. | 8) |
| 9) Given Δ WYX ≅ ΔQYP. | 10) Given Δ ABC ≅ ΔFED.  Find the values of x and y. |
| 11) Given: E is the midpoint of AC and BD     1. List the corresponding sides and angles. 2. Is Δ AEB ≅ ΔCED? Explain. | |
| 12) Given: Δ SUT ≅ VUT   1. List the corresponding sides and angles. 2. Is Δ AEB ≅ ΔCED? Explain. 3. What is the measure of m∠V? Explain how you determined your answer. | |

**Exit Ticket: DO NOT BEGIN UNTIL INSTRUCTED BY THE TEACHER.   
Directions: Write your first and last name with the class period on a separate piece of paper. Complete the problems below on that separate piece of paper.**

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| 1. List the three pairs of corresponding angles using correct angle notation. 2. List the three pairs of corresponding sides using correct segment notation.   ../../../../Desktop/Corresponding_Image.gif |
| 1. ΔMAS ≅ ΔNER. Solve for x and y. |